ELSEVIER

Volumes 275–276, 1 July 1998

Inorganica Chimica Acta

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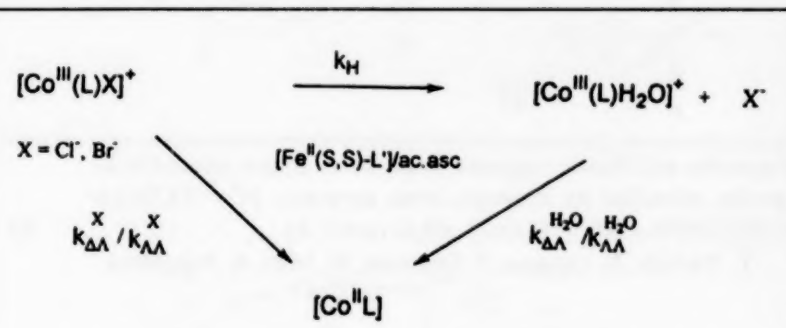

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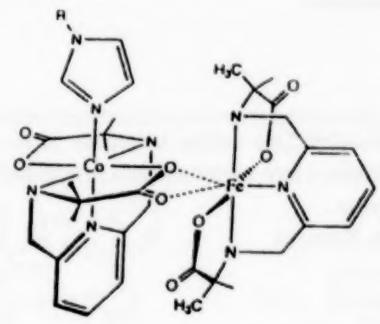

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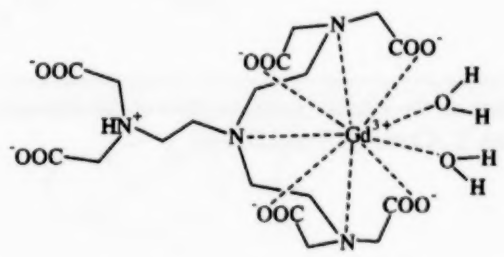

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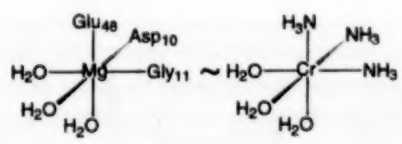

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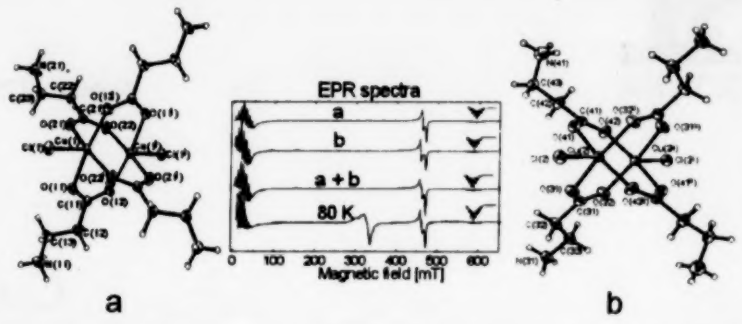

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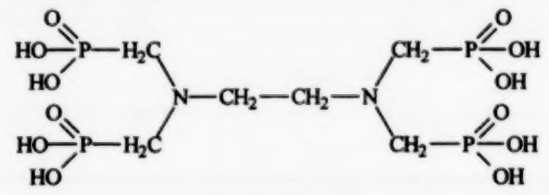

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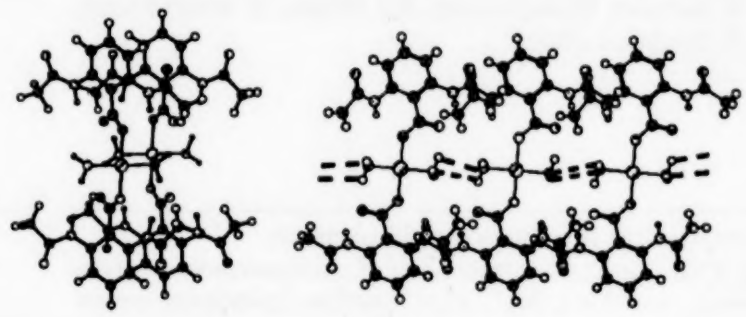

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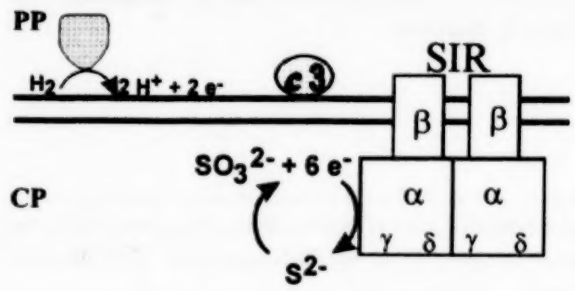

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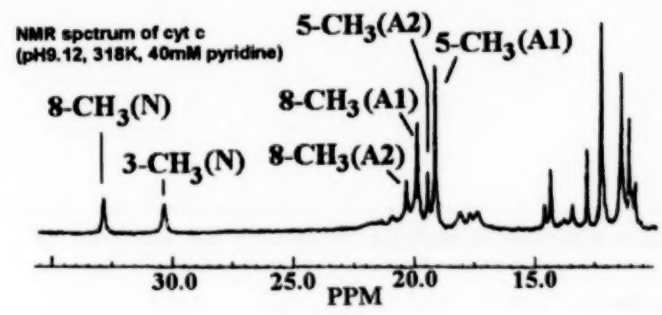

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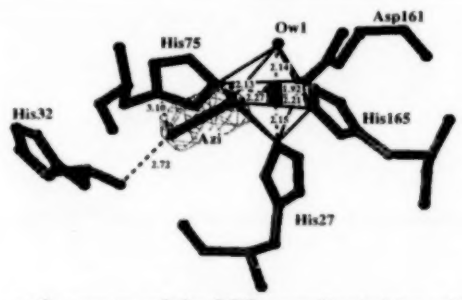

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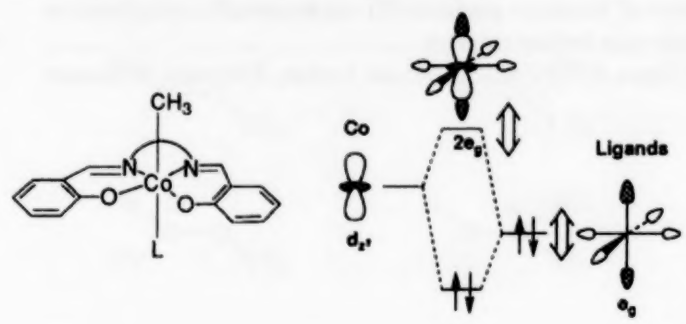
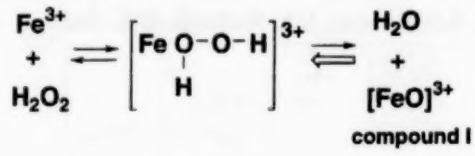
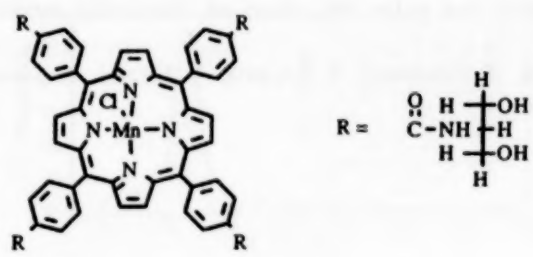
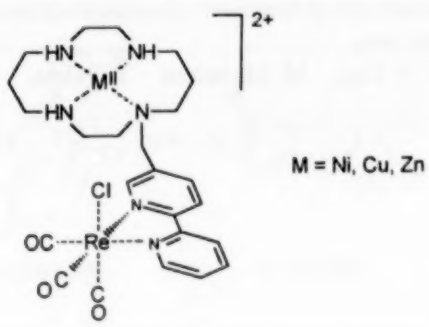
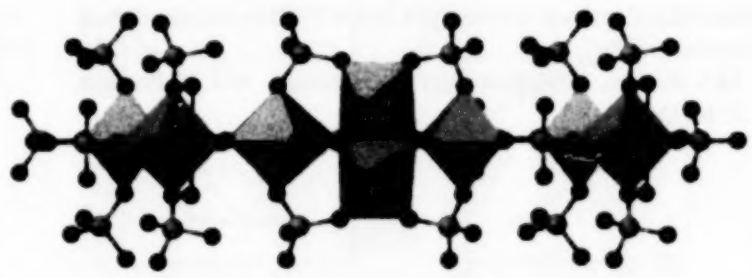
The Co–CH_3 bond in Schiff base B_{12} models: influence of the *trans* and equatorial ligands as assessed by Fourier transform Raman spectroscopy S. Hirota, E. Kosugi, L.G. Marzilli, O. Yamauchi	90	
Reversible formation of high-valent-iron-oxo porphyrin intermediates in heme-based catalysis: revisiting the kinetic model for horseradish peroxidase M.J.H. van Haandel, J.-L. Primus, C. Teunis, M.G. Boersma, A.M. Osman, C. Veeger, I.M.C.M. Rietjens	98	
New non-ionic water-soluble porphyrins: evaluation of manganese(III) polyhydroxylamide porphyrins as MRI contrast agents J.E. Bradshaw, K.A. Gillogly, L.J. Wilson, K. Kumar, X. Wan, M.F. Tweedle, G. Hernandez, R.G. Bryant	106	
Electrochemical and photophysical properties of two-component coordination compounds containing a metallocyclam and an $Re^{I}(bipy)(CO)_3Cl$ subunit I. Costa, L. Fabbrizzi, P. Pallavicini, A. Poggi, A. Zani	117	
Hydrothermal synthesis and structural characterization of the three-dimensional framework solids $(NH_4)[V_2(OH)(PO_4)_2(H_2O)]\cdot H_2O$ and $Rb_6[(Mo_9V_3O_6)(PO_4)_{10}(H_2PO_4)_3(OH)_9]\cdot 8.5H_2O$ V. Soghomonian, L.A. Meyer, R.C. Haushalter, J. Zubieta	122	

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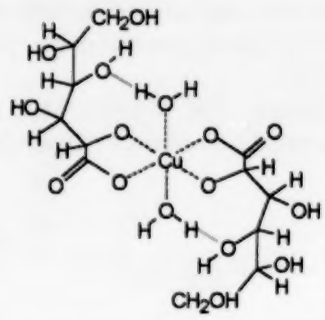

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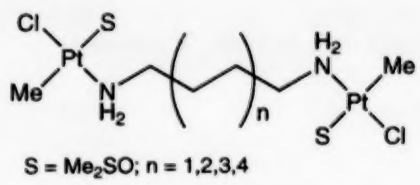

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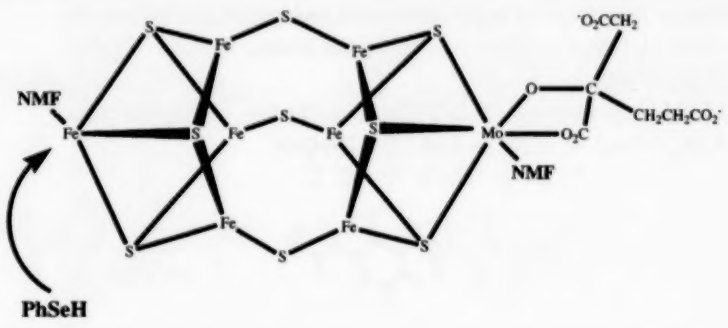

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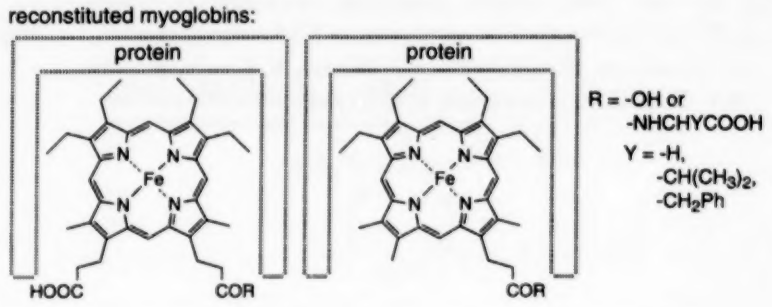

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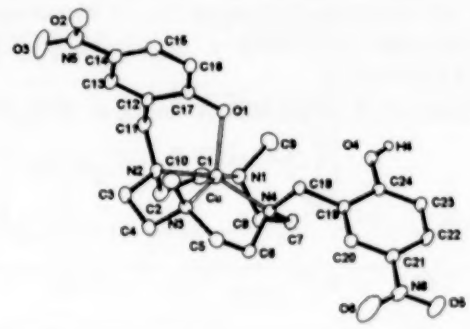

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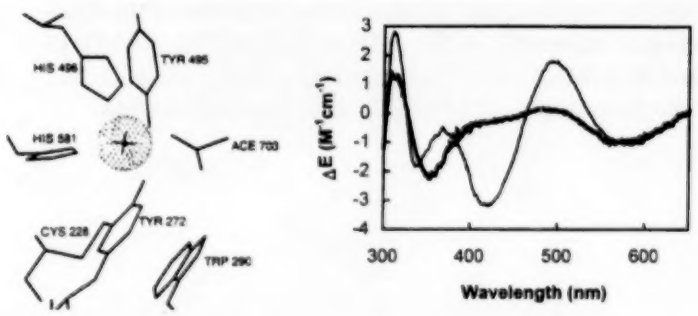
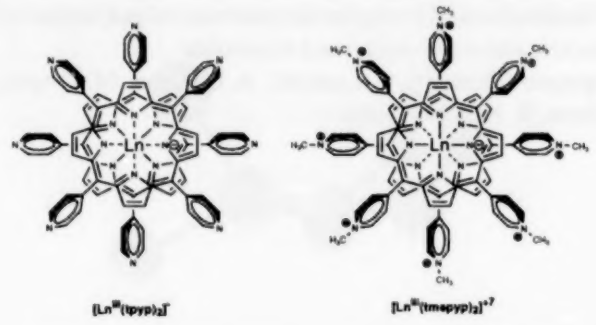
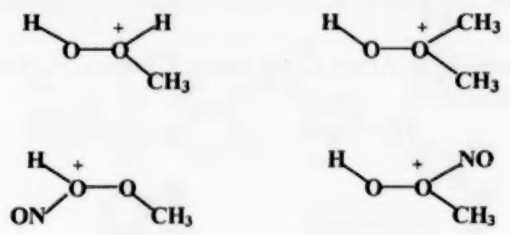
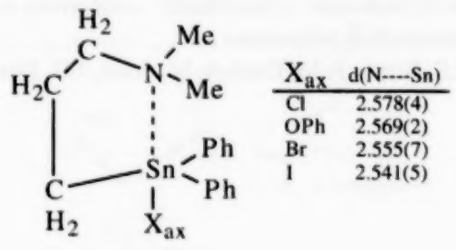
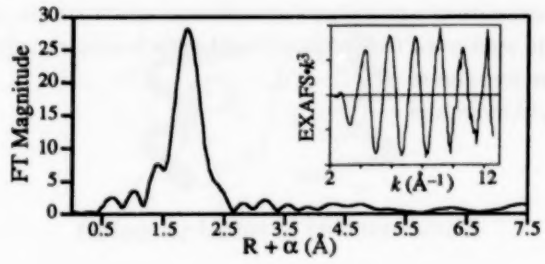
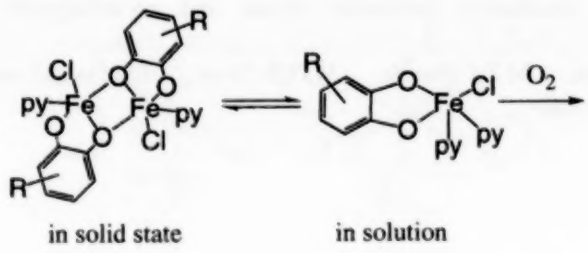
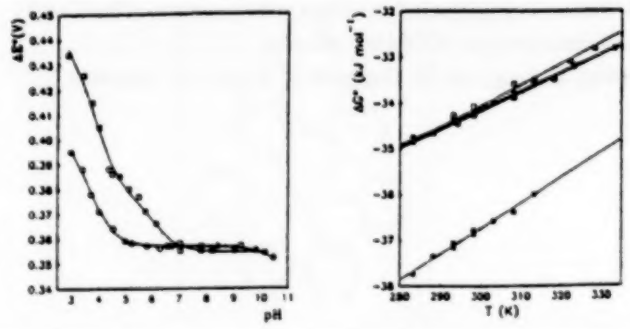
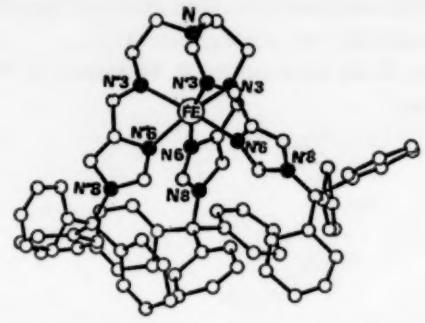
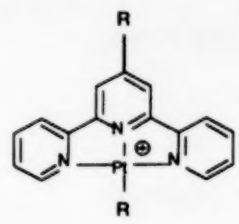
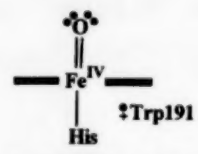
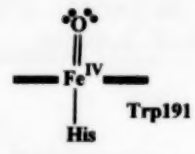


Synthesis, UV–visible and electrochemical studies of lipophilic and hydrophilic lanthanide(III) bis(porphyrinates) ..... G.A. Spyroulias, D. de Montauzon, A. Maisonat, R. Poilblanc, A.G. Coutsolelos	182	
Gas-phase positive and negative ion chemistry of methyl hydroperoxide..... M. Aschi, M. Attinà, F. Cacace, R. Cipollini, F. Pepi	192	
Nucleophilic attack within Ge, Sn and Pb complexes containing $Me_2N(CH_2)_3$ — as a potential intramolecular donor ligand..... A. Zickgraf, M. Beuter, U. Kolb, M. Dräger, R. Tozer, D. Dakternieks, K. Jurkschat	203	
Structural characterization of the zinc site in *Escherichia coli* L-threonine dehydrogenase using extended X-ray absorption fine structure spectroscopy ..... K. Clark-Baldwin, A.R. Johnson, Y.-W. Chen, E.E. Dekker, J.E. Penner-Hahn	215	
X-ray crystallographic and absorption spectroscopic analyses of structures of catecholato(pyridine)iron chloride complexes in relevance to functional model complexes for catechol 1,2-dioxygenases..... T. Funabiki, Y. Nagai, H. Kojima, T. Tanaka, S. Yoshida, H. Masuda	222	
Thermodynamics of reduction of *Chromatium vinosum* high-potential iron–sulfur protein and its histidine depleted H42Q mutant ..... E. Babini, M. Borsari, F. Capozzi	230	

Sterically hindered iron(II) complex of a new tripodal polyimidazole ligand: structure and reactivity toward superoxide ..... I. Morgenstern-Badarau, F. Lambert, A. Deroche, M. Cesario, J. Guilhem, B. Keita, L. Nadjo	234	
Interaction of organometallic cationic complex ions containing terpyridine ligands with nucleic acids: an investigation on aggregative phenomena..... M. Casamento, G.E. Arena, C. Lo Passo, I. Pernice, A. Romeo, L. Monsù Scolaro	242	
Spectroscopic study of the compound ES and the oxoferryl compound II states of cytochrome *c* peroxidase: comparison with the compound II of horseradish peroxidase ..... A.E. Pond, G.S. Bruce, A.M. English, M. Sono, J.H. Dawson	250	 CcP-ES (IV, R*)  CcP•II$_F$ (IV, R)
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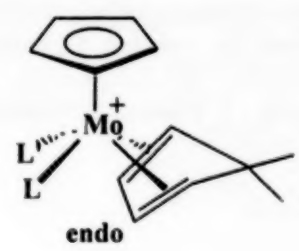
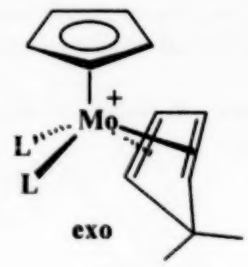
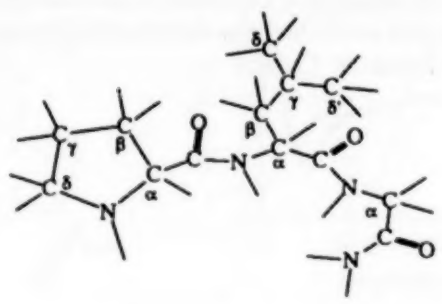
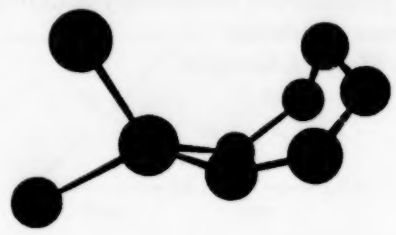
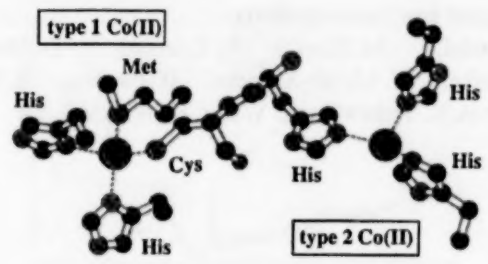
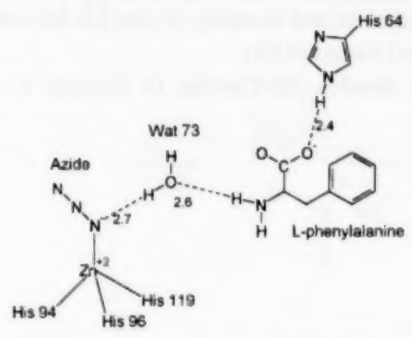
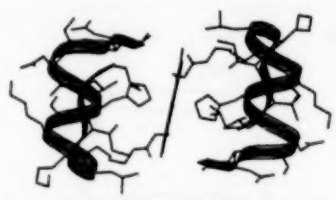
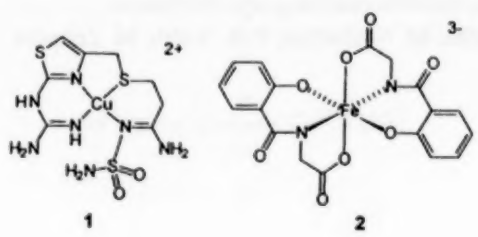
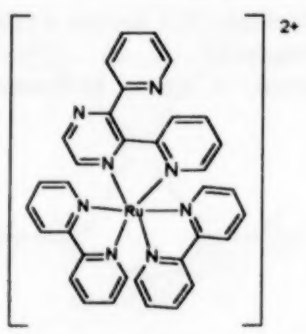
Structural preferences of η^4-dienecyclopentadienyl complexes: molecular mechanics, molecular orbital and crystallographic studies ..... V. Félix, M.J. Calhorda, M.G.B. Drew, I.S. Gonçalves, C.C. Romão	263	 endo  exo
ESR and NMR investigation of structure and dynamics of the Cu(II) complex of melanostatin in DMSO solution ..... R. Basosi, E. Gaggelli, N. Gaggelli, R. Pogni, G. Valensin	274	

Tetrahedral coordination by a seven-membered chelate ring ..... V. Broughton, G. Bernardinelli, A.F. Williams	279	
Spectroscopic distinction between two Co(II) ions substituted for types 1 and 2 Cu in nitrite reductase ..... S. Suzuki, Deligeer, K. Yamaguchi, K. Kataoka, S. Shidara, H. Iwasaki, T. Sakurai	289	
A ternary complex of carbonic anhydrase: X-ray crystallographic structure of the adduct of human carbonic anhydrase II with the activator phenylalanine and the inhibitor azide ..... F. Briganti, V. Iaconi, S. Mangani, P. Orioli, A. Scozzafava, G. Vernaglione, C.T. Supuran	295	
Miniaturized hemoproteins: design, synthesis and characterization of mimochrome II ..... A. Lombardi, F. Nastri, M. Sanseverino, O. Maglio, C. Pedone, V. Pavone	301	 Molecular Model of Mimochrome II
Metallodrug complexes that mediate DNA and lipid damage via sulfite autoxidation: copper(II) famotidine and iron(III) bis-(salicylglycine) ..... J.G. Muller, C.J. Burrows	314	
Crystal and molecular structure of $[Ru(bpy)_2(2,3\text{-dpp})]Cl_2 \cdot 3H_2O \cdot CH_3CN$ and ^1H and ^{99}Ru NMR spectra of $[Ru(bpy)_2(2,n\text{-dpp})][PF_6]_2$ (bpy = 2,2′-bipyridine, dpp = bis-(2-pyridyl)pyrazine, $n = 3$ or 5) ..... M. Belicchi Ferrari, G. Gasparri Fava, G. Pelosi, G. Predieri, C. Vignali, G. Denti, S. Serroni	320	

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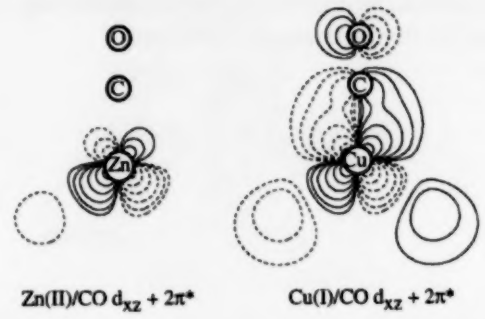

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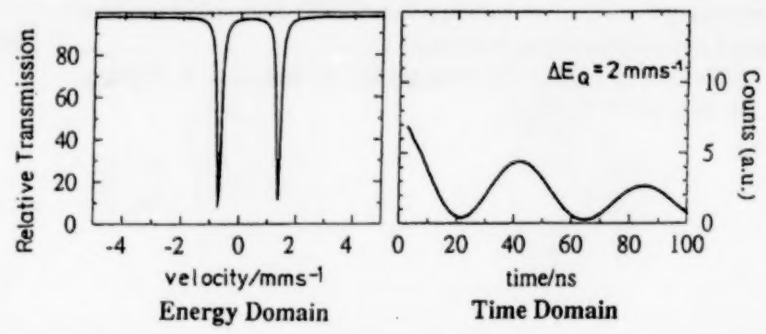

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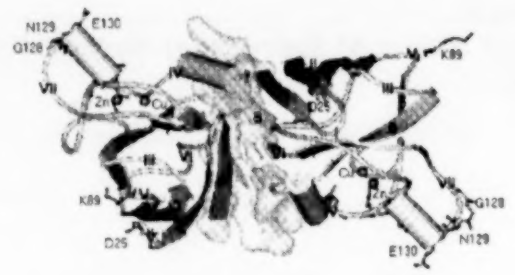

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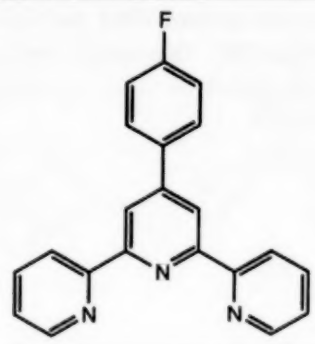

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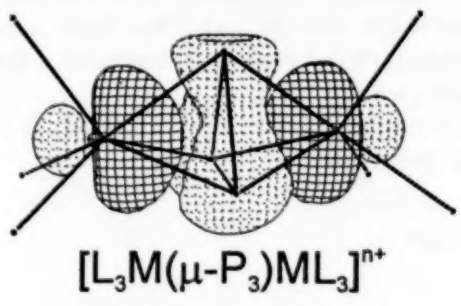

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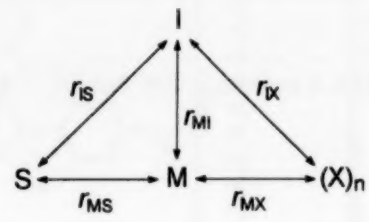

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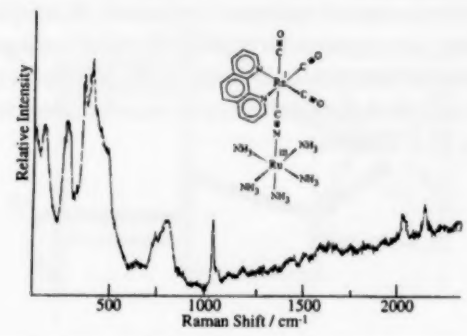

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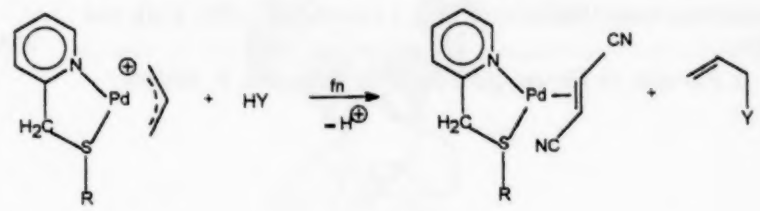

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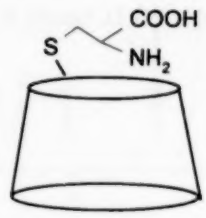

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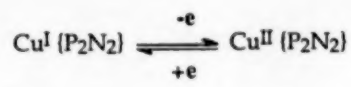

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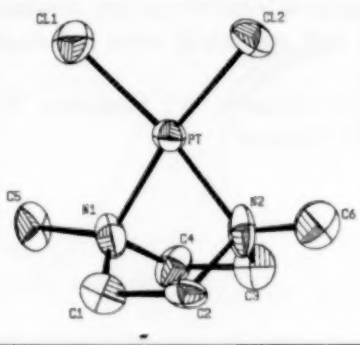

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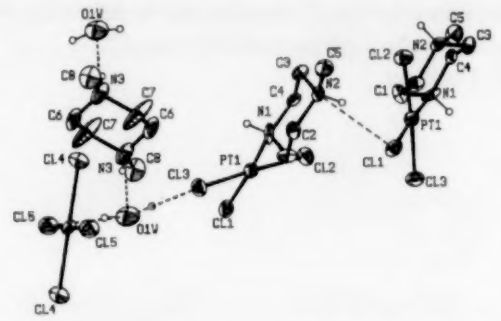

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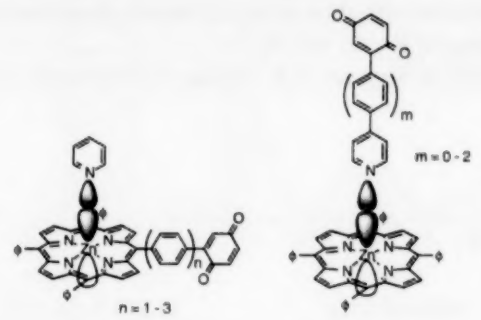

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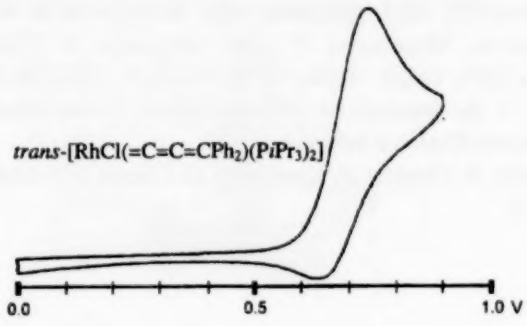

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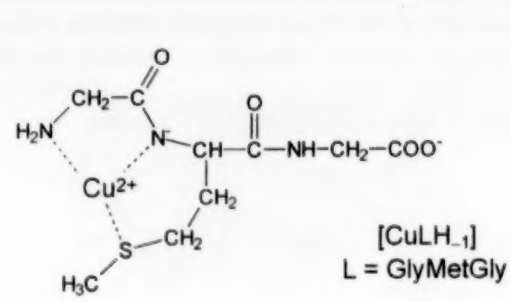

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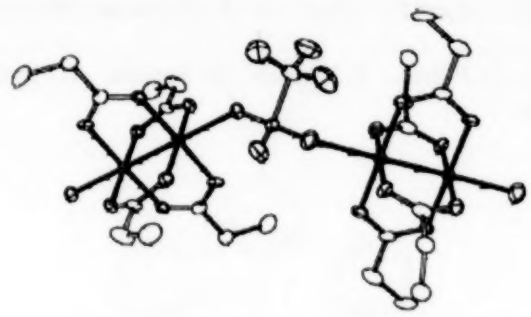

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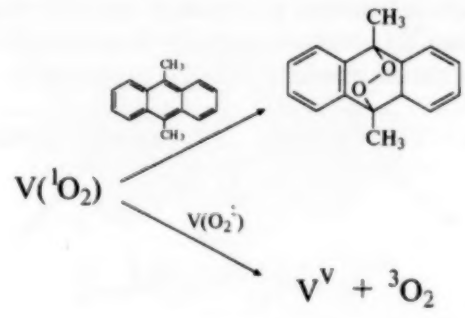

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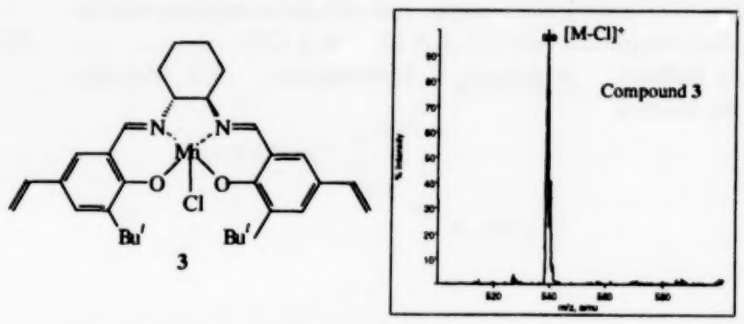

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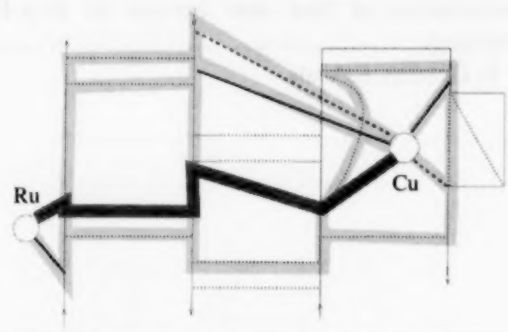

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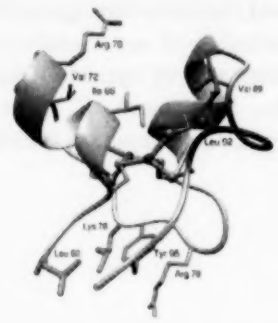

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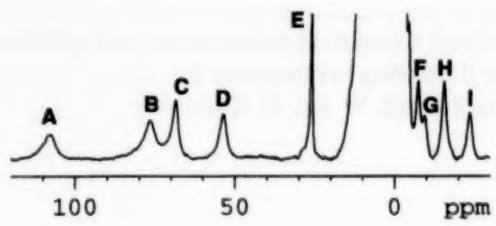

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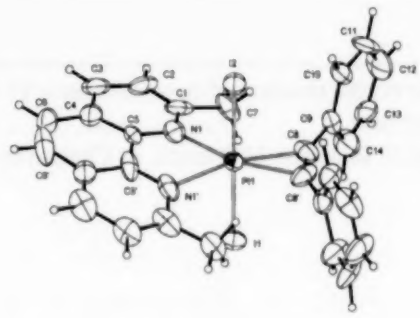

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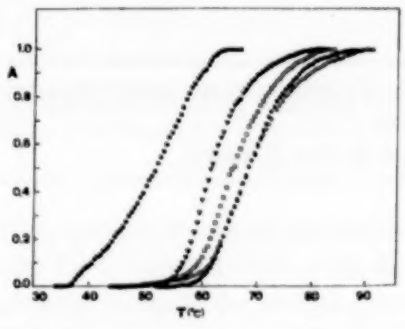
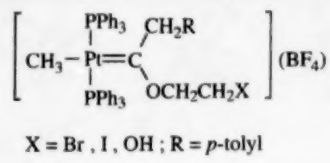
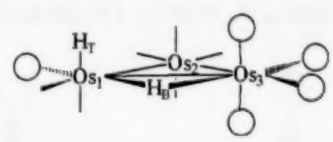
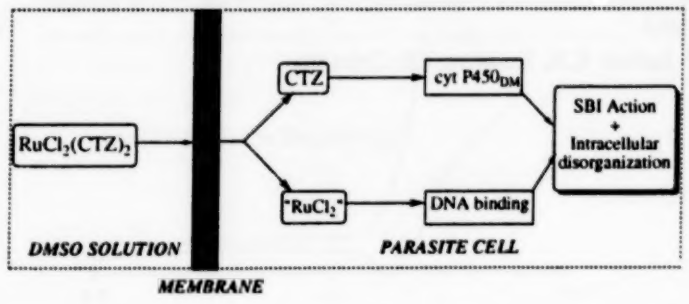


Reactions of platinum(II)–alkyne and –alkynyl complexes with the hydroxy compounds $HO(CH_2)_2X$ (X = Br, I, OH) ..... 515 U. Belluco, R. Bertani, S. Fornasiero, R.A. Michelin, M. Mozzon	 X = Br , I , OH ; R = *p*-tolyl
NMR characterization of four new isomers of $H(\mu\text{-}H)Os_3(CO)_{10}$(phosphine) ..... 521 S. Aime, R. Gobetto, E. Valls	 ○ Coordination sites for a Phosphine
Toward a novel metal based chemotherapy against tropical diseases 4. Synthesis and characterization of new metal-clotrimazole complexes and evaluation of their activity against *Trypanosoma cruzi* .. 528 R.A. Sánchez-Delgado, M. Navarro, K. Lazardi, R. Atencio, M. Capparelli, F. Vargas, J.A. Urbina, A. Bouillez, A.F. Noels, D. Masi	

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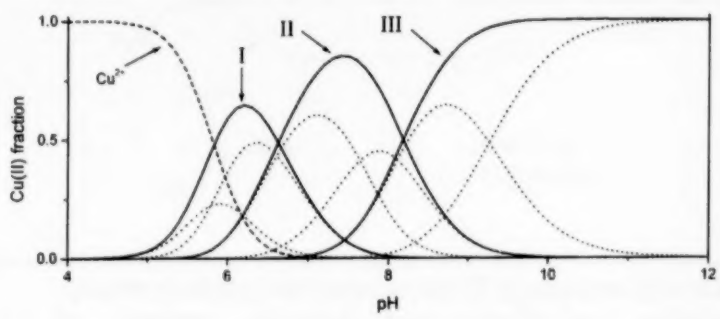
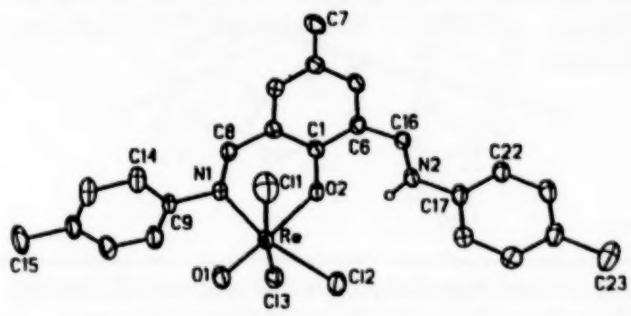
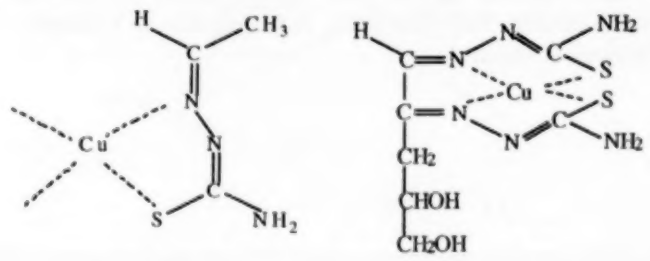
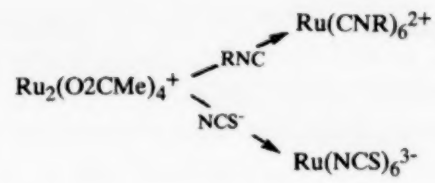
Kanamycin revisited: a combined potentiometric and spectroscopic study of copper(II) binding to kanamycin B ..... 541 M. Jeżowska-Bojczuk, W. Bal, H. Kozłowski	
Synthesis and X-ray crystal structure of an oxorhenium(V) complex with a double Schiff base ..... 546 M. Shivakumar, S. Banerjee, M. Menon, A. Chakravorty	
EPR characterization of a series of mono- and bis-thiosemicarbazone copper(II) complexes ..... 552 A. Diaz, R. Pogni, R. Cao, R. Basosi	

Three reactions of Ru_2^{5+} compounds of the paddlewheel type that lead to cleavage of the Ru–Ru bond..... 557 F.A. Cotton, A. Yokochi	

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